

Rabbit Anti-Nestin antibody

SL0008R

Product Name Nestin

Chinese Name 巢蛋白/神经上皮 Stem cells 蛋白抗体

Alias ESTM 46; FLJ 21841; FLJ21841; Intermediate filament protein; Nbla00170; Nes; NEST_RAT; Nestin.

Research Area Tumour Cardiovascular Developmental biology Neurobiology Stem cells Cell type markers TumourCell biologyMaker

Immunogen Species Rabbit

Clonality Polyclonal

React Species Mouse(predicted:Rat)

Applications Flow-Cyt=1µg/Test (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 209kDa

Cellular localization cytoplasmic

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from rat Nestin: 681-750/1893

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Product Detail Nestin is a Class VI intermediate filament expressed in the developing central nervous system (CNS) in early embryonic neuroepithelial stem cells. This protein has been

widely used as a predominant marker for stem / progenitor cells, glioma cells, and tumor endothelial cells in the mammalian CNS. Furthermore, it is a superior angiogenic marker to evaluate neovascularity of endothelial cells in tumor.

Function:

Required for brain and eye development (By similarity). Promotes the disassembly of phosphorylated vimentin intermediate filaments (IF) during mitosis and may play a role in the trafficking and distribution of IF proteins and other cellular factors to daughter cells during progenitor cell division. Required for survival, renewal and mitogen-stimulated proliferation of neural progenitor cells.

Subunit:

Forms homodimers and homotetramers in vitro. In mixtures with other intermediate filament proteins such as vimentin and alpha-internexin, this protein preferentially forms heterodimers which can assemble to form intermediate filaments if nestin does not exceed 25%. Interacts with FHOD3.

Subcellular Location:

cytoplasm

Tissue Specificity:

CNS stem cells.

Post-translational modifications:

Constitutively phosphorylated. This increases during mitosis when the cytoplasmic intermediate filament network is reorganized.

Similarity:

Belongs to the intermediate filament family.

SWISS:

P21263

Gene ID:

25491

Database links:

[Entrez Gene: 10763](#) Human

[Entrez Gene: 18008](#) Mouse

[Entrez Gene: 25491](#) Rat

[Omim: 600915](#) Human

[SwissProt: P48681](#) Human

[SwissProt: Q6P5H2](#) Mouse

[SwissProt: P21263](#) Rat

[Unigene: 527971](#) Human

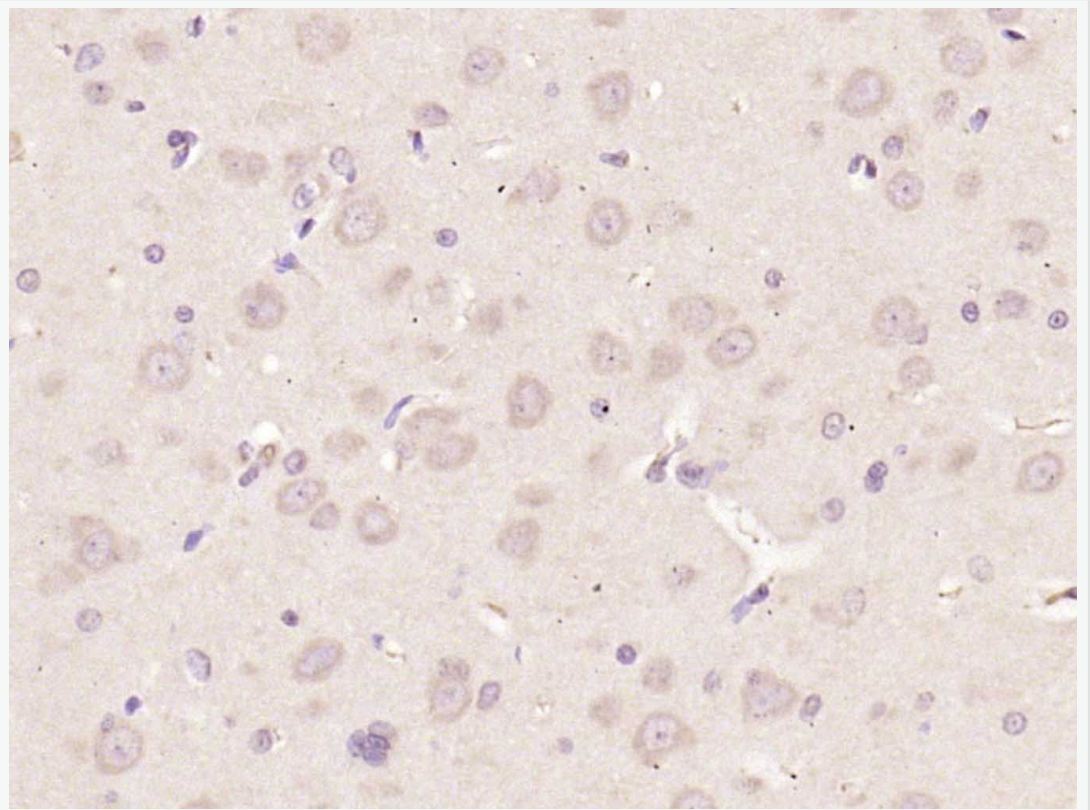
[Unigene: 331129](#) Mouse

[Unigene: 9701](#) Rat

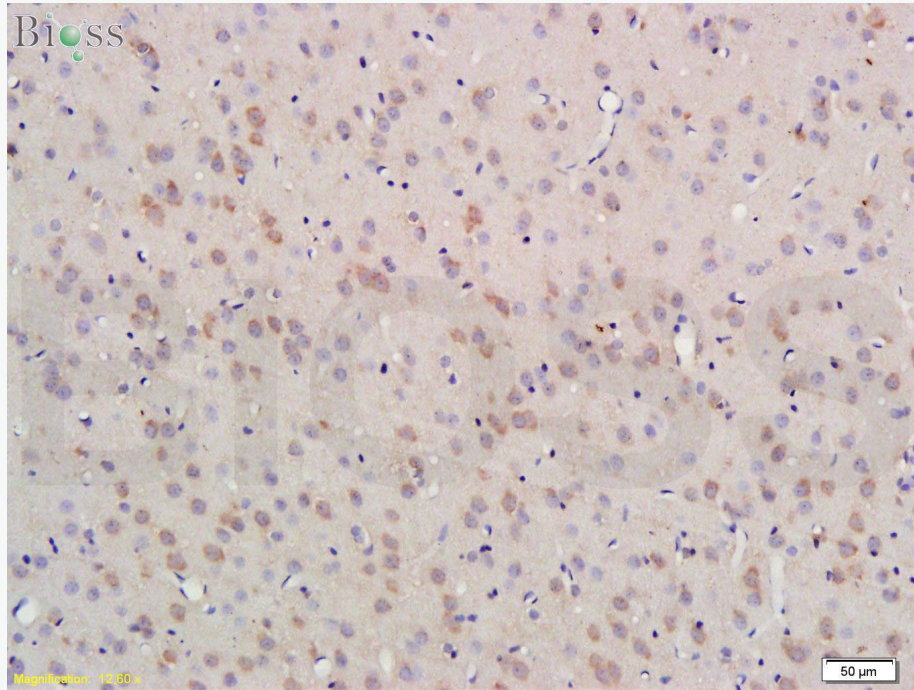
神经 Stem cellsMaker

在动物体早期发育过程中，中枢神经系统发育尤为重要。Nestin 是一种中等纤维蛋白，它在哺乳动物神经前体细胞中表达较高，目前已被广泛用于神经前体细胞的重要标志分子。研究 Nestin 的表达调控规律，将有助于人们认识神经前体细胞的生物特性。此抗体还表达中枢神经系统 Stem cells 及神经 epithelial cells。

**Product
Picture**

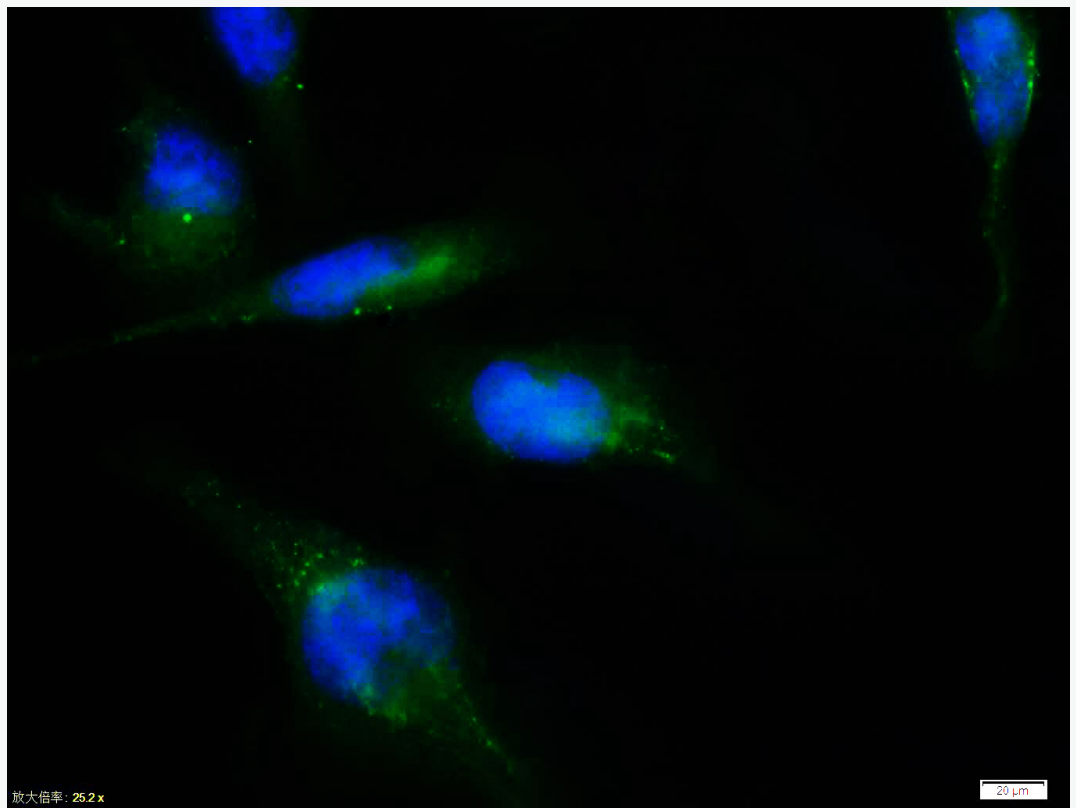


Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Nestin) Polyclonal Antibody, Unconjugated (SL0008R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

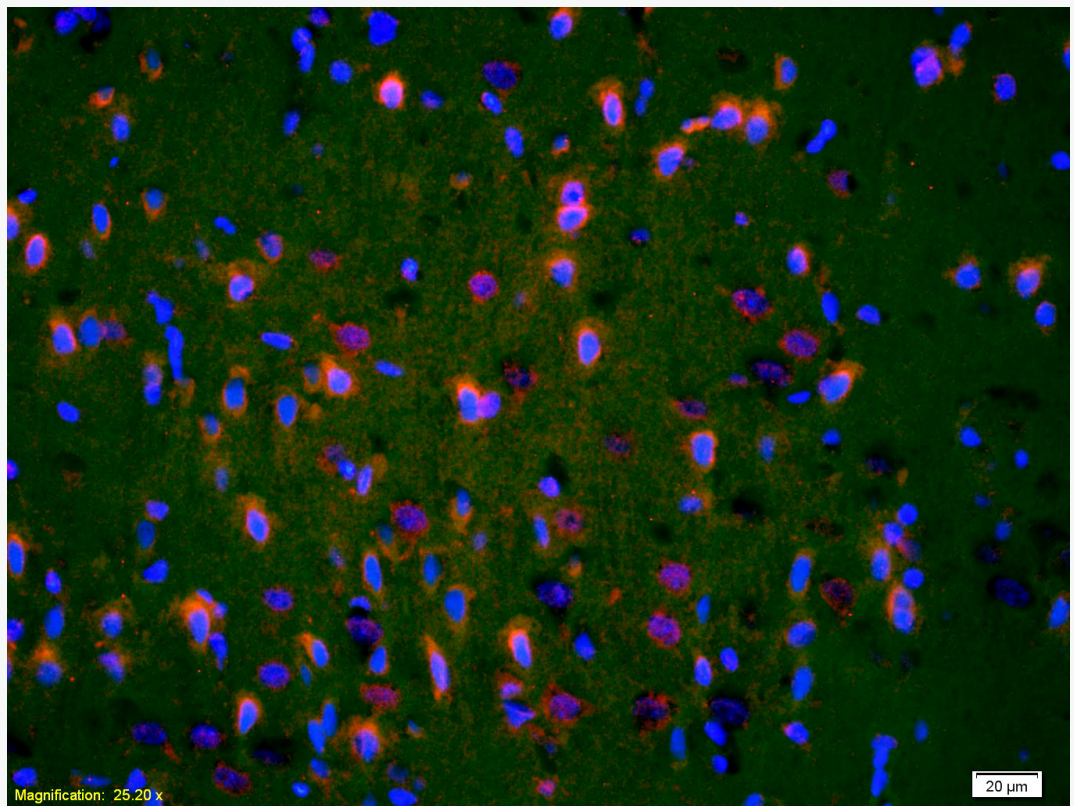


bs-0008R Anti-Nestin

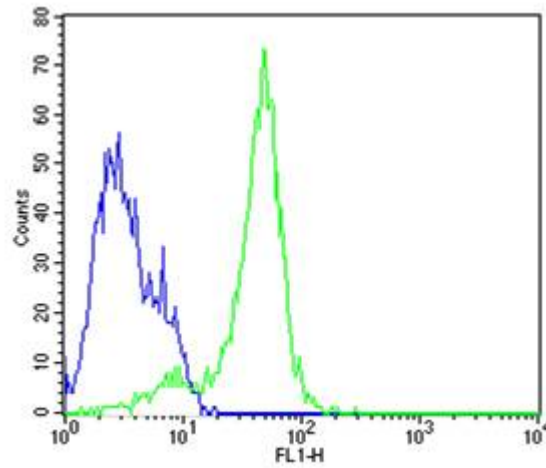
Formalin-fixed and paraffin-embedded rat brain tissue labeled with Rabbit Anti-Nestin Polyclonal Antibody, Unconjugated(bs-0008R) at 1:300 followed by conjugation to the secondary antibody and DAB staining



Tissue/cell:U-251 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Nestin) polyclonal Antibody, Unconjugated (SL0008R) 1:100, 90 minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Tissue/cell: rat brain tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min;
Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-Nestin Polyclonal Antibody, Unconjugated(SL0008R) 1:200,
overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3
conjugated(SL0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C.
DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Cell: Neuro-2a

Concentration:1:100

Host/Isotype:Rabbit/IgG

Flow cytometric analysis of Rabbit IgG isotype control on Neuro-2a(blue)

compared with primary antibody(Cat#: SL0008R)(green) followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG(H+L) secondary antibody .